REMARKS

Claims 1-10 remain in this application. In view of the remarks that follow, Applicant respectfully requests favorable consideration and timely indication of allowance.

Claims 1-10 have been rejected under 35 USC § 103(a) as being unpatentable over Kanterakis (US 6,324,207). This rejection is respectfully traversed.

Applicant discloses a novel and unobvious approach for regulating power during soft handoff. Soft handoff refers to a process whereby a wireless device establishes a communications link with a new base station before breaking the existing communications link with the original base station. During soft handoff, the forward link signal strength for each of the two base stations is measured at the wireless device and fed back to a base station controller. The feedback may be a power control bit transmitted with the reverse link pilot channel. The base station controller uses the feedback to regulate the forward link power of the two base stations during soft handoff. However, as the wireless device travels further away from the original base station and towards the new base station, the feedback relating to the original base station tends to become less reliable. To increase the reliability of the feedback relating to the original base station, the wireless device can increase the power level of the feedback channel. To avoid a corresponding increase in noise resulting from the reverse link transmission from the original base station, the power level of one or more of the other reverse link channels can be reduced. This reduction in power should not adversely impact performance because an active communications link between the wireless device and the new base station exists.

Kanterakis is fundamentally different from Applicant's approach. Kanterakis is directed to a technique whereby data transmission is temporarily suspended during soft handoff. When a soft handoff between a source base station and a target base station is commenced, data that would normally be transmitted over the reverse link is stored at the remote station, and data that would normally be transmitted over the forward link is stored at the source base station. Once the soft handoff is complete,

the data stored in at the remote station is transmitted to the target base station, and the data stored at the source base station is transferred to the target base station for transmission to the remote station. These forward and reverse link transmissions are effectively burst transmissions at a higher data rate and power level than usual to allow the transmission of both the accumulated data during soft handoff and the current data without loss.

Referring now to the specific claims, Applicant submits that they recite subject matter that is neither disclosed nor suggested by Kanterakis. For example, independent claims 1, 5, 7 and 9 each recite a method or system to detect the "*quality of a signal received at a base station transceiver subsystem*" during soft handoff and instruct "*the base station transceiver subsystem to improve the signal quality if the quality is below a predefined target signal quality.* " The Patent Office takes the position that this limitation is disclosed by Kanterakis at column 20, line 50 through column 21, line 5. However, a careful reading of the text cited by the Examiner clearly reveals how Kanterakis differs from Applicant's approach. First, Kanterakis does not teach or suggest the process of detecting the signal quality *received at the base station* as recited by the claims. Rather, Kanterakis teaches the process of detecting the signal quality *received at the remote station*. Second, in response to a reduction signal quality, Kanterakis teaches the process of *initiating a handoff* to the target base station and *storing data* for transmission to the target base station once the handoff is complete. In contrast, Applicant recites a process that instructs the base station to *increase the signal quality* of the reverse link transmission in response to a reduction in the signal quality. Clearly, there is no similarity at all between the teachings of Kanterakis and the subject matter recited in claims 1, 5, 7 and 9.

Independent claims 1, 5 and 7 also recite instructing the wireless device to "*increase a pilot channel transmit power level*" and "*decrease a power gain of other channels in relation to the pilot channel.*" The Patent Office, admitting that Kanterakis "fails to specifically disclose [instructing] the wireless device to increase a pilot channel power level," points to column 23, lines 20-30 to suggest that it would have been

obvious to increase the reverse link power level for the pilot channel in view of the fact that Kanterakis describes a forward link packet having both a pilot signal and a transmitting power control (TPC) signal. Although Applicant does not necessarily agree with the Patent Office's view of obviousness, it is a moot point because Kanterakis is completely devoid of any disclosure whatsoever directed to a process of instructing the wireless device to decrease the gain of other channels in relation to the pilot channel. The Patent Office's reliance on column 14, lines 28-31, for this limitation is misplaced because that text is nothing more than a general background discussion pointing out that a reference signal transmitted with a data frame consumes power that could otherwise be used for the transmission of the data. The Patent Office has failed to specifically point out any teaching in Kanterakis directed to controlling the gain of other channels in relation to the pilot channel, let alone a specific instruction to decrease the gain as required by claims 1, 5 and 7.

The Patent Office has failed to establish a *prima facie* case of obviousness because, even if Kanterakis were modified in the manner suggested by the Patent Office, it would still not yield the claimed invention. As explained in detail above, the limitations recited in claims 1, 5, 7, and 9 are not disclosed or suggested in Kanterakis, and therefore, it is submitted that these claims are directed toward patentable subject matter. Claims 2-4, 6, 8, and 10 are all dependent, either directly or indirectly, from one of these independent claims, and therefore, include all the limitations of the claims from which they respectively depend. Accordingly, these claims are also allowable for the same reasons set forth hereinbefore as well as the additional limitations recited.

REQUEST FOR ALLOWANCE

In view of the foregoing, Applicants submit that all pending claims in the application are patentable. Accordingly, reconsideration and allowance of this application are earnestly solicited. Should any issues remain unresolved, the Examiner is encouraged to telephone the undersigned at the number provided below.

Respectfully submitted,

Dated: 22 November 2002 By: Sandra L. Godsey

Sandra L. Godsey
Reg. No. 42,589
Attorney for Applicant

QUALCOMM Incorporated
5775 Morehouse Drive
San Diego, California 92121
Telephone: (858) 651-4517
Facsimile: (858) 658-2502

APPENDIX A

The paragraph beginning on page 6, line 27, and ending on page 7, line 2 has been amended as follows:

FIG. 1 illustrates the operation of a system **100** [of the] in accordance with one embodiment to control forward link power during a soft handoff. During a soft handoff, a mobile unit **102** communicates with a BTS **106** and a BTS **108** in a conventional fashion. That is, data frames are exchanged between the mobile unit **102** and the BTS **106** and the BTS **108**. The mobile unit **102** is initially communicating solely with the BTS **106**. As the mobile unit **102** changes location and begins to communicate with the BTS **108**, the power control (PC) bits from mobile unit **102** are received by both BTS **106** and BTS **108**.

The paragraph beginning on page 7, line 3, and ending on line 12 of the same page has been amended as follows:

A mobile unit **102** is communicating with a base station controller (BSC) **104** via the base transceiver subsystem (BTS) **106** and/or the BTS **108**. A wireless communication link **112** couples the mobile unit **102** with the BTS **106**. It should be understood that the wireless communication link **112** includes both a forward link **112a** and a reverse link **112b**. The BTS **106** communicates with the BSC **104** via a conventional bi-directional communication link **114**, or backhaul, in a well-known fashion. The Base Station Controller BSC **104** is coupled to a land line **110**, such as a public switched telephone network (PSTN). The operation of the BSC **104** in communicating via the land line **110** is well known and need not be described in greater detail herein.